

**ABSTRACT**

The invention relates to nucleic acid probes and to broad-range primers that are useful in the identification of bacterial species and the diagnosis of bacterial infections. Especially, the invention relates to specific nucleic acid probes that originate from hyper-variable regions situated near the conserved sequences of topoisomerase genes of infection-causing bacteria. The invention also relates to broad-range primers originating from the conserved regions of topoisomerase genes. In addition, the invention relates to the use of these nucleic acid probes and broad-range primers in the diagnosis of bacterial infections as well as to diagnostic methods in which these nucleic acid probes and broad-range primers are used.